

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
17 February 2005 (17.02.2005)

PCT

(10) International Publication Number  
**WO 2005/014526 A1**

(51) International Patent Classification<sup>7</sup>: C07C 227/16, 229/28, 213/08, 215/20, C07D 211/32, 211/02

(21) International Application Number:  
PCT/EP2004/006654

(22) International Filing Date: 19 June 2004 (19.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
103 33 588.9 24 July 2003 (24.07.2003) DE

(71) Applicant (for all designated States except US): DEGUSSA AG [DE/DE]; Bennigsenplatz 1, 40474 Düsseldorf (DE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): HARTUNG, Rolf [DE/DE]; Hainstrasse 19, 63543 Neuberg (DE). HITZEL-ZERRAHN, Franz [DE/DE]; Heinestrasse 21, 64546 Mörfelden (DE). MÜLLER, Thomas [DE/DE]; Wilhelm-Busch-Ring 13, 63486 Bruchköbel (DE). PIETSCH, Jörg [DE/DE]; Kälberauer Strasse 16A, 63755 Alzenau (DE).

(74) Common Representative: DEGUSSA AG; Intellectual Property Management, Patente und Marken, Standort Hanau, Postfach 13 45, 63403 Hanau (DE).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AL, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, ER, EG, ES, FI, GB, GD, GI, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SI, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

Published:

— with international search report  
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2005/014526 A1

(54) Title: PROCESS FOR THE HYDROGENATION OF AROMATIC COMPOUNDS

(57) Abstract: The present invention focuses on a process for the hydrogenation of aromatic or heteroaromatic compounds and in particular on the ring hydrogenation of compounds having the formula (I). Aromatic amino acids and amino alcohols can be successfully ring-hydrogenated using a platinum-rhodium mixed catalyst. The products can be used inter alia as mimetics in bioactive peptide active ingredients.